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## PATENT

**Attorney Docket No. 8332-327**

I hereby certify that this correspondence is being deposited with the United States Postal Service, as first class mail, in an envelope addressed to: Hon. Commissioner of Patents and Trademarks, Washington, DC 20231, on 2/1/94.

TOWNSEND and TOWNSEND KHOURIE and CREW

By

TOWNSEND and TOWNSEND KHOURIE and CREW  
*Shan MacGregor*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of

RANGAN, et al.

Serial No. 08/147,359

Filed: November 1, 1993

**For: DATA COMMUNICATION  
NETWORK TRANSFER PORT,  
CASCADE PORT AND/OR  
SYNCHRONIZATION**

**Examiner:** Not Assigned

Group Art Unit: Not Assigned

## INFORMATION DISCLOSURE STATEMENT

February / , 1994

Hon. Commissioner of Patents  
and Trademarks  
Washington, D.C. 20231

Dear Sir:

Applicants direct the Examiner's attention to the references below, also listed on the accompanying Form PTO-1449. A copy of each is also enclosed.

The following U.S. Patents are set forth below by issue date.

AA. U.S. Patent No. 4,220,816, issued September 2, 1980 to Howells et al.

AB. U.S. Patent No. 4,258,434, issued March 24, 1981  
to Glowinski et al.

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AC. U.S. Patent No. 4,412,324, issued October 25, 1983  
to Glowinsky et al.

AD. U.S. Patent No. 4,445,213 issued April, 1984 to  
Baugh, et al.

AE. U.S. Patent No. 4,530,088, issued July 16, 1985 to  
Hamstra et al.

AF. U.S. Patent No. 4,549,292, issued October 22, 1985  
to Isaman et al.

AG. U.S. Patent No. 4,577,312 issued March, 1986 to  
Nash.

AH. U.S. Patent No. 4,587,650, issued May 6, 1986 to  
Bell.

AI. U.S. Patent No. 4,637,014, issued January 13, 1987  
to Bell et al.

AJ. U.S. Patent No. 4,766,590 issued August, 1988 to  
Hamada.

AK. U.S. Patent No. 4,766,591 issued August, 1988 to  
Huang.

AL. U.S. Patent No. 4,845,609, issued July 4, 1989 to  
Lighthart et al.

AM. U.S. Patent No. 4,961,188, issued October 2, 1990  
to Lau.

AN. U.S. Patent No. 4,985,891 issued January, 1991 to  
Fujiwara, et al.

AO. U.S. Patent No. 5,001,707, issued March 19, 1991  
to Kositpaiboon et al.

The following items are set forth below by apparent  
publication date (if any).

AP. Integrated PBX Systems, An NCC State of the Art  
Report, The National Computing Centre Limited, 1987.

AQ. ISDN Basic Rate Interface System Design Guide,  
Telenetworks document, August, 1989

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AR. ISDN Primary Rate Interface System Design Guide, Telenetworks, document, July, 1989

AS. IEEE 802.3 Draft Supplement to IEEE Std 802.3 CSMA/CD Access Method and Physical Layer Specifications, Institute of Electrical and Electronics, November, 1989.

AT. A communication system proposal was presented to representatives of Apple Computer on March 5, 1990. The information presented is summarized in a set of drawings attached hereto. To the best of applicant's knowledge, this item is unpublished.

AU. Irube et al., "Integrated Information and Communication System for Business Networks" Hitachi Review 40(3):241-247 (1991).

AV. HMUX ERS "FDDI-II Hybrid Multiplexor (HMUX)" Rev. 2.4, (March 25, 1991).

AW. On or about November 1, 1991, IBM Corporation provided a "Task Order" and appendix containing a description of the functionality of a desired device to representatives of the assignee. A copy of pages 6 and 7 of the "Task Order" (believed to be the only pages containing technical description) and the appendix which is titled, "Isoethernet Project Local Cluster Controller Version 1.2", are enclosed. To the best of applicant's knowledge, the item is unpublished. As a result of work in developing a product to provide the desired functionality, a prototype network hub controller was sent to IBM Corporation on March 27, 1992.

AX. "Exchangeable Card Architecture Specification," Release 1.00, bearing the date December 20, 1991, includes, at pages 7, 20 and 22, disclosure related to power management.

AY. "PCMCIA Socket Services Interface Specification," Draft 2.00b, bearing the date July 17, 1992, includes a description of power management.

AZ. "VersaNet™ An Ethernet Extension for Isochronous Communications" bearing the date August 14, 1992 is a paper sent to National Semiconductor Corporation from Condor Systems, Inc. of San Jose, California on August 18, 1992. Applicants have no knowledge as to whether this item represents a publication.

BA. "IBM's Multimedia Venture: Opportunity for its Hardware?", Vol. 38, No. 1930, pg. 1, September 21, 1992.

BB. "DP839XX Isochronous Time Slot Exchanger (IsoTSX™)", Revision 0.8, bearing the date 10/29/92 and "DP839XX Isochronous Ethernet Physical Layer isoPHY™" Revision 1.1, bearing the date October, 1992, were disclosed to International Business Machines. It is currently believed that this disclosure took place sometime after about October, 1992.

BC. A disclosure of a communication system was presented at the IEEE 802.9 Standards Meeting on November 8-12, 1992. The pages entitled "Multi-Media Applications are Ready" summarizes the material presented at that meeting.

BD. "National Proposes Isochronous Ethernet", Electronic News, Vol. 38, No. 1940, pg. 19, November 30, 1992.

BE. IEEE 802.9 Draft Standard Integrated Services (IS) LAN Interface at the MAC and PHY Layers, Institute of Electrical and Electronics, November, 1992.

BF. "DP839XX Isochronous Ethernet Physical Layer IsoPHY™", Revision 2.1, bearing the date "December, 1992" and "DP839XX Isochronous Time Slot Exchanger (isoTSX)", Revision 1.0, bearing the date 12/13/92, were disclosed to IBM and Ericsson. It is currently believed that this disclosure took place sometime after about December, 1992.

BG. "DP839XX Isochronous Ethernet Physical Layer isoPHY™" Revision 3.0, bearing the date "December, 1992" and "Isochronous Time Slot Exchanger (IsoTSX™) Workbook," Revision 1.2, bearing the date "2/16/93" was disclosed to Luxcom, Inc. of

Fremont, California. It is currently believed that this disclosure took place in about February, 1993.

BH. DP8390 Network Interface Controller: An Introductory Guide, Local Area Network Databook, National Semiconductor Corporation, pps. 1-206 to 1-213, 1992 Edition.

BI. DP83932B Systems-Oriented Network Interface Controller, Local Area Network Databook, National Semiconductor Corporation, pps. 1-288 to 1-383, 1992 Edition.

BJ. DP83950A Repeater Interface Controller, Local Area Network Databook, National Semiconductor Corporation, pps. 3-3 to 3-73, 1992 Edition.

BK. DP83950EB at IEEE 802.3, Multi-Port Repeater Evaluation Kit, Local Area Network Databook, National Semiconductor Corporation, pps. 75-87, 1992 Edition.

BL. American National Standard for Information System - document X3.139-1987, discusses a media access controller for use in connection with a fiber distributed data interface.

BM. "Scheme for Fast Ethernet Proposed," by Loring Wirbel, appears to be a newspaper article regarding an extension for ethernet. At present, the date of this article is unknown, but it is currently believed to be prior to March, 1993.

BN. "Local Area Network Databook" published by National Semiconductor, pages 1-3 to 1-9, 1-242 to 1-248, 5-3 to 5-7, discloses integrated ethernet network interface controller products, ethernet repeater interface controller products and FDDI products.

BO. "Token-Ring Network Architecture Reference," pages 5-1 through 5-28 disclose token ring signalling information including information relating to a beacon media access controller frame at pages 5-10 and 5-17.

The Examiner's attention is directed to the following applications which were filed on even date herewith.

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U.S. Patent Application No. 08/146,336 for  
ASYNCHRONOUS PROCESSOR ACCESS TO A SWITCH TABLE IN A  
NETWORK WITH ISOCHRONOUS CAPABILITY  
Filing Date: November 1, 1993

U.S. Patent Application No. 08/146,389  
DATA COMMUNICATION NETWORK WITH MANAGEMENT PORT FOR  
ISOCHRONOUS SWITCH  
Filing Date: November 1, 1993

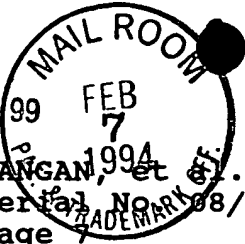
U.S. Patent Application No. 08/146,723  
LOW POWER ISOCHRONOUS NETWORKING MODE  
Filing Date: November 1, 1993

U.S. Patent Application No. 08/146,729  
NETWORK LINK DETECTION AND GENERATION  
Filing Date: November 1, 1993

U.S. Patent Application No. 08/146,337  
TIME SLOT EXCHANGER SWITCHING MECHANISM  
IN A NETWORK FOR DATA COMMUNICATION HAVING  
ISOCHRONOUS CAPABILITY  
Filing Date: November 1, 1993

It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Applicants believe that their invention as claimed is patentable over the above references taken alone or in any combination. However, Applicants do not admit that any of the information or references is properly citable to support a rejection. Applicants reserve the right to demonstrate that their claimed invention was made prior to any one or more of the above-identified references or that one or more the above is not a publication. No inference should be drawn as to the pertinence of the references based on the order in which they are presented.



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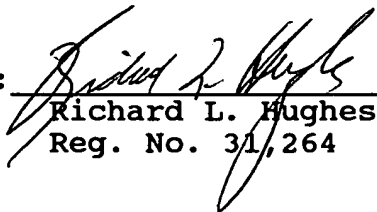
Applicants respectfully request that the Examiner review the foregoing references to make his or her own determination of the patentability of the present invention and that the references be made of record in the file of this application.

This Information Disclosure Statement is being filed less than three months after the filing date and before the mailing date of the first substantive Office Action.

Although no fee is believed to be due, the Commissioner is hereby authorized to charge any fee necessitated by this transmittal to the Townsend and Townsend Deposit Account No. 20-1430.

Respectfully submitted,

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and CREW

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Enclosures:  
PTO-1449  
Cited References